

COVID-19, Mpox, and Other Infectious Diseases

Situational Report in the ASEAN Region

— ASEAN BioDiaspora Virtual Center (ABVC)

February 15, 2023 | Issue No. 448



ASSOCIATION OF SOUTHEAST ASIAN NATIONS



ASEAN BIODIASPORA VIRTUAL CENTER (ABVC)



MINISTRY OF HEALTH
REPUBLIC OF INDONESIA

GLOBAL PARTNERS





Table of Contents

COVID-19	1
Highlights and Situation Overview	1
Global Update	1
Regional Update	1
Vaccine Update	1
Research Update	1
Cases and Deaths Table	4
COVID-19 Cases in ASEAN Region Table	4
COVID-19 Cases in Asia-Pacific Region Table	4
Epi curve Among ASEAN Countries	6
Vaccination Status in ASEAN	7
ASEAN Outlook Assessment	8
Infectious Diseases	9
Infectious Diseases Map in ASEAN Region and Neighboring Countries	9
Infectious Diseases Other than COVID-19, Mpox, and Dengue	10
Infectious Disease Global Updates	10
Marburg Virus Disease (MVD)	10
Pediatric Influenza	10
Measles	10
Anthrax	11
Wild Poliovirus Type 3 (WPV 3)	11
Infectious Disease in ASEAN and Neighboring Countries Updates	11
Measles	11
Malaria	12
HFMD	12
Enterovirus	12
Hantavirus	13
Dengue	14
Dengue Cases in ASEAN Region Map	14
Dengue Cases in ASEAN Region Table	14
Dengue Narrative Report	15
Special Report on Notable Diseases	16
Unknown Hemorrhagic Fever	16
Nipah Virus (NiV) Outbreak	16
Mpox	17
Mpox Cases Globally Map	17
Mpox Daily Trend Globally	18
Highlights and Situation Overview	19



Mpox Cases in ASEAN Region Table	19
Mpox Cases in Asia-Pacific Region Table	19
Top 5 Countries with Most Mpox Cases Globally	19
Mpox Cases per Region	20
References	21



COVID-19: Highlights and Situation Overview

Global Update

- **Worldwide**, there have been over 669 million cases and over 6 million deaths attributed to COVID-19.

Regional Update

- **Philippines'** Department of Health (DOH) continues to see Covid-19 as a "continuing risk" because of rising multiple subvariants, even if cases continue to decline and hospitalizations on a plateau. The country has a single XBB.1.5 case, which the ministry described as a local case with an "unknown exposure," but has since recovered. The country has also reported three CH.1.1 cases, which the World Health Organization has described as a "variant under monitoring". Furthermore, the Philippines has detected its first case of COVID-19 Omicron subvariant XBF—a recombinant sublineage of BA.5.2.3 and CJ.1. According to DOH authorities, even if XBF was linked to the rise of infections in Australia and Sweden, this subvariant does not suggest any differences in disease severity and/or clinical manifestations compared to the original Omicron variant.

Vaccine Update

- **Philippines:** Department of Health (DOH) is aiming to release by next week the guidelines for the use of bivalent COVID-19 vaccines as it anticipates the arrival of the initial batch in the country next month. DOH also said that almost 1.4 million doses of bivalent vaccines have been confirmed as donations to the country. The COVAX facility will donate an initial 1 million wherein 2,000 doses that are expected to arrive before March ends. DOH added that healthcare workers, senior citizens, and people with comorbidities are the ones to benefit from the first batch of bivalent COVID-19 vaccines.

Research Update (Published and peer-reviewed studies)

- The effectiveness of the second BNT162b2 (Pfizer–BioNTech) mRNA COVID-19 booster vaccine dose is well established, but its safety has yet to be fully understood.¹ The absence of sufficient vaccine safety information is one of the key contributors to vaccine hesitancy.¹ This study, **Safety of the fourth COVID-19 BNT162b2 mRNA (second booster) vaccine: a prospective and retrospective cohort study**, evaluated the safety profile of the second BNT162b2 mRNA COVID-19 booster vaccine using data from a retrospective cohort and a prospective cohort.¹ Short term effects of the second booster vaccine were analysed and compared to those of the first booster using data from, first, a retrospective cohort of 250,000 random members of the second-largest health-care organisation in Israel (Maccabi Healthcare Services) and, second, a prospective cohort (the PerMed study) of 4,698 participants from all across Israel.¹ Individuals who were aged 18 years or older who received the second BNT162b2 mRNA COVID-19 vaccine booster during the vaccination campaign, from Dec 30, 2021, to July 22, 2022, were eligible for inclusion in the retrospective cohort analysis.¹ Participants from the prospective cohort received smartwatches, downloaded a dedicated mobile application, and granted access to their medical records.¹ The smartwatches continuously monitored several physiological measures, including heart rate.¹ For analysis of the prospective cohort data, we used the Kruskal-Wallis test to compare heart rate levels observed before and after vaccination.¹ Medical records of the retrospective cohort were accessed to examine the occurrence of 25 potential adverse events.¹ The retrospective cohort included 94,169 participants who received the first booster and 17814 who received the second booster.¹ Comparing the 42 days before and after



vaccination, the second booster was not associated with any of the 25 adverse events investigated, including myocardial infarction (risk difference, 2.25 events per 10000 individuals [95% CI -3.93 to 8.98]) and Bell's Palsy (-1.68 events [-5.61 to 2.25]).¹ None of the individuals was diagnosed with myocarditis or pericarditis following vaccination with the second booster.¹ The prospective cohort included 1,785 participants who received the first booster and 699 who received the second booster.¹ There were no significant differences after inoculation with the first booster compared with the second booster (heart rate: day 2 [p=0.3], day 6 [p=0.89]; extent of self-reported reactions [p=0.06]).¹ There was a significant increase in mean heart rate relative to that observed during the week before vaccination (baseline) levels during the first 3 days following the second booster (p<0.0001), peaking on day 2 (mean difference of 1.61 bpm [1.07 to 2.16] compared with baseline).¹ Mean heart rate values returned to baseline levels by day 6 (-0.055 bpm [-0.56 to 0.45] compared with baseline).¹ Both retrospective and prospective analyses support the safety of the second booster.¹ [\[Full text\]](#)

- Methods this retrospective study, **Comparative outcomes of extracorporeal membrane oxygenation for COVID-19 delivered in experienced European centres during successive SARS-CoV-2 variant outbreaks (ECMO-SURGES): an international, multicentre, retrospective cohort study**, investigated the outcomes of patients who received extracorporeal membrane oxygenation (ECMO) for acute respiratory distress syndrome (ARDS) due to different variants of SARS-CoV-2 and included consecutive adult patients with laboratory-confirmed SARS-CoV-2 infection who received ECMO for ARDS in 21 experienced ECMO centres in eight European countries (Austria, Belgium, England, France, Germany, Italy, Portugal, and Spain) between Jan 1, 2020, and Sept 30, 2021.² Data on patient characteristics, clinical status, and management before and after the initiation of ECMO were collected.² Participants were grouped according to SARS-CoV-2 variant (wild type, alpha, delta, or other) and period of the pandemic (first [Jan 1–June 30] and second [July 1–Dec 31] semesters of 2020, and first [Jan 1–June 30] and second [July 1–Sept 30] semesters of 2021).² ECMO was initiated in 1345 patients. 90-day mortality was 42% (569 of 1345 patients died) overall, and 43% (297/686) in patients infected with wild-type SARS-CoV-2, 39% (152/391) in those with the alpha variant, 40% (78/195) in those with the delta variant, and 58% (42/73) in patients infected with other variants (mainly beta and gamma).² Mortality was 10% higher (50%) in the second semester of 2020, when the wild-type variant was still prevailing, than in other semesters (40%).² Independent predictors of mortality were age, immunocompromised status, a longer time from intensive care unit admission to intubation, need for renal replacement therapy, and higher Sequential Organ Failure Assessment haemodynamic component score, partial pressure of arterial carbon dioxide, and lactate concentration before ECMO.² After adjusting for these variables, mortality was significantly higher with the delta variant than with the other variants, the wild-type strain being the reference.² Although crude mortality did not differ between variants, adjusted risk of death was highest for patients treated with ECMO infected with the delta variant of SARS-CoV-2.² [\[Full text\]](#)
- This large cohort study, **Association of COVID-19 Vaccination With Risk for Incident Diabetes After COVID-19 Infection**, included adult patients with 1 or more COVID-19 infections treated within the Cedars-Sinai Health System in Los Angeles, California from March 2020 to June 2022 and used International Classification of Diseases to identify cardiometabolic diagnoses (hypertension, hyperlipidemia, and diabetes) newly reported before or after a patient's first COVID-19 infection.³ A self-controlled exposure-crossover design was used to estimate odds of a new cardiometabolic diagnosis occurring 90 days after vs 90 days before COVID-19 infection vs the odds of a new cardiometabolic diagnosis with those of a new benchmark diagnosis (ie, urinary tract infection and gastroesophageal reflux), representing a marker of health care engagement unrelated to COVID-19.³ The cohort of 23 709 patients (mean [SD] age,



47.4 [19.3] years) included 12 706 females (54%) and 10 981 males (46%) (22 patients of unknown sex) with 1 or more COVID infection.³ Rates of new-onset diabetes, hypertension, hyperlipidemia, and benchmark diagnoses occurring in the 90 days after COVID-19 infection were higher than those before infection.³ The highest odds post infection were for diabetes (2.35; 95% CI, 1.94-2.89; $P < .001$), followed by hypertension (1.54; 95% CI, 1.35- 1.76; $P < .001$), benchmark diagnoses (1.42; 95% CI, 1.25-1.61; $P < .001$), and hyperlipidemia (1.22; 95% CI, 1.03-1.47; $P = .03$).³ In adjusted multivariable models, risk of new-onset diabetes (vs benchmark) diagnosis occurring after vs before COVID-19 infection was significantly elevated (OR, 1.58; 95% CI, 1.24-2.02; $P < .001$); however, risks of hypertension and hyperlipidemia vs benchmark diagnoses were not elevated.³ Although the diabetes risk after infection was higher among unvaccinated (OR, 1.78; 95% CI, 1.35-2.37; $P < .001$) than vaccinated (OR, 1.07; 95% CI, 0.64-1.77; $P = .80$) patients, the interaction term between vaccination status and diabetes diagnosis was not statistically significant (OR, 0.59; 95% CI, 0.34-1.06; $P = .08$).³ Age, sex, and timing of index infection regarding the Omicron variant were not associated with an increased risk of a new cardiometabolic diagnosis before or after COVID-19 infection in any model.³ [\[Full text\]](#)

- The study **Association of COVID-19 Vaccination With Risk for Incident Diabetes After COVID-19 Infection** estimated the likelihood of new-onset diabetes, hypertension, and abnormal cholesterol levels (hyperlipidemia) in the first 90 days before and after COVID-19 diagnosis.¹² Researchers compared the odds of a new cardiometabolic diagnosis with those of non-COVID-related benchmark diagnoses of urinary tract infection or gastroesophageal reflux (commonly known as heartburn) among 23,709 COVID-19 survivors from March 2020 to June 2022.¹² The rates of incident diabetes, hypertension, hyperlipidemia, and the two benchmark diagnoses were higher than those before COVID-19.¹² The highest post-infection odds were for diabetes, followed by hypertension, the benchmark diagnosis, and hyperlipidemia.¹² According to the researchers, Mechanisms contributing to post-infection diabetes risk remain unclear, although persistent inflammation contributing to insulin resistance is a proposed pathway.¹² According to the lead researcher, the data trends and patterns suggest that COVID-19 may act as a disease accelerator, amplifying the risk of an illness that may come later in life.¹² [\[Full article\]](#)
- The study on the **Longitudinal Assessment of Chest CT Findings and Pulmonary Function in Patients after COVID-19** found persistent lung abnormalities in patients two years after COVID-19.¹³ Three serial chest CT scans and pulmonary function tests were obtained at six months, 12 months, and two years after symptom onset of 144 patients (79 men and 65 women, median age 60) who were discharged from the hospital after SARSCoV-2 infection between January 15 and March 10, 2020.¹³ Residual lung abnormalities after discharge from the hospital included fibrosis (scarring), thickening, honeycombing, cystic changes, dilation of the bronchi, and more.¹³ Over two years, the incidence of lung abnormalities gradually decreased. At six months, 54% of patients showed lung abnormalities.¹³ On two-year follow-up CT scans, 39% (56/144) of the patients had lung abnormalities, including 23% (33/144) with fibrotic lung abnormalities and 16% (23/144) with non-fibrotic lung abnormalities.¹³ The remaining 88 cases (61%) showed no abnormalities.¹³ The researchers advise that patients with residual lung abnormalities or respiratory symptoms after COVID-19 should be followed up to detect and manage pulmonary changes and functional impairment.¹³ [\[Full article\]](#)



Cases and Deaths as of 15 February 2023

- As of 15 February 2023 (1PM, GMT+7), worldwide, there were **669,044,312** confirmed cases, including **6,765,175** deaths. Globally, Case Fatality Rate (CFR) was **1.2%**.
- 35,588,288 confirmed cases** of COVID-19 have been reported in the **ASEAN Region**.
- The Case Fatality Rate in the **ASEAN Region** is range between **0.1 to 3.1%**

COVID-19 cases in ASEAN region

REGION	COUNTRY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASEAN REGION	Brunei Darussalam	10 Mar 20	14-Feb-23	276,825	-	225	-	63,890	450,404	445,929	338,987	99.3
	Cambodia	27 Jan 20	14-Feb-23	138,705	-	3,056	-	841	15,244,858	14,609,937	10,433,215	87.1
	Indonesia	02 Mar 20	14-Feb-23	6,733,215	247	160,873	4	2,488	203,657,535	172,693,321	67,952,274	62.7
	Lao PDR	24 Mar 20	14-Feb-23	218,000	1	758	-	3,041	5,888,649	5,222,417		69.4
	Malaysia	25 Jan 20	14-Feb-23	5,039,850	200	36,953	-	15,774	28,125,245	27,536,657	17,056,957	81.1
	Myanmar	23 Mar 20	14-Feb-23	633,867	1	19,490	-	1,173	34,777,314	27,545,329	2,227,351	50.8
	Philippines	30 Jan 20	14-Feb-23	4,074,821	-	65,968	11	3,769	78,369,243	73,937,435	21,341,197	64.0
	Singapore	23 Jan 20	14-Feb-23	2,218,623	-	1,722	-	38,899	5,161,990	5,120,768	4,440,289	90.8
	Thailand	13 Jan 20	14-Feb-23	4,727,628	-	33,894	-	6,790	57,005,497	53,486,086	32,143,431	74.6
	Vietnam	23 Jan 20	14-Feb-23	11,526,754	50	43,186	-	11,950	90,450,881	85,848,363	57,452,750	87.4
ASEAN COUNTRIES				35,588,288	499	366,125	14	148,614	519,131,616	466,446,242	213,386,451	

*There have been no tests reported in the last 14 days in the ASEAN Region.

COVID-19 cases in Asia-Pacific region

REGION	COUNTRY/ TERRITORY	FIRST CONFIRMED CASE(S)	LATEST REPORT ON CONFIRMED CASE(S)	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED	FULLY VACCINATED/ 100
ASIA-PACIFIC REGION	Afghanistan	24-Feb-20	14-Feb-23	209,036	25	7,896	-	549	11,606,705	10,894,509		26.5
	Australia	25-Jan-20	08-Feb-23	11,315,226	-	18,828	-	44,114	22,236,871	21,655,312	19,762,423	82.7
	Bangladesh	08-Mar-20	13-Feb-23	2,037,688	-	29,445	-	1,250	150,629,515	131,182,263	65,897,152	76.6
	Bhutan	05-Mar-20	14-Feb-23	62,611	3	21	-	8,205	699,116	677,669	634,641	86.6
	People's Republic of China*		14-Feb-23	13,230,455	20,699	36,011	0	80,932	1,339,608,531	1,304,575,996	214,031,616	89.7
	Cook Islands	17-Feb-22	10-Feb-23	7,022	-	2	-	32,831	15,084	14,715	10,209	86.4
	Fiji	18-Mar-20	10-Feb-23	68,864	-	883	-	7,738	711,686	640,712	170,632	68.9
	French Polynesia	12-Mar-20	04-Jan-23	77,957	-	649	-	27,913	190,765	186,059	112,237	60.8
	Guam	15-Mar-20	13-Feb-23	60,903	-	417	-	36,405	158,611	144,042		85.5
	India	30-Jan-20	14-Feb-23	44,684,274	74	530,753	-	3,270	1,027,279,394	951,464,506	224,093,416	67.1



Japan	16-Jan-20	19-Oct-22	21,858,528	-	46,014	-	17,312	104,612,252	103,222,040	169,610,887	83.3
Kiribati	25-Jan-22	31-Jan-23	5,008	-	18	-	4,258	96,184	73,888	23,419	56.3
Maldives	07-Mar-20	14-Feb-23	185,723	2	311	-	34,979	399,151	385,081	167,187	73.5
Marshall Islands	26-Oct-20	09-Feb-23	15,590	-	17	-	26,518	43,310	34,694		44.6
Micronesia	11-Jan-21	23-Jan-23	23,671	-	60	-	20,798	84,729	71,253		69.6
Mongolia	10-Mar-20	14-Feb-23	1,007,890	2	2,179	-	31,251	2,272,965	2,175,617	1,044,337	64.0
Nepal	24-Jan-20	14-Feb-23	1,001,118	2	12,020	-	3,499	27,678,479	24,159,118	8,951,403	79.1
New Caledonia	17-Mar-20	31-Jan-23	79,845	-	314	-	27,743	192,229	184,660	101,849	63.7
New Zealand	28-Feb-20	13-Feb-23	2,199,579	-	3,839	-	44,734	4,300,097	4,138,926	3,523,903	79.8
Niue	03-Sep-21	12-Feb-23	749	-	-	-	34,580	1,636	1,634	1,224	83.7
Northern Mariana Islands	28-Mar-20	10-Feb-23	13,582	-	41	-	23,738	46,567	43,873		84.6
Pakistan	26-Feb-20	14-Feb-23	1,576,552	13	30,640	-	728	154,665,740	131,368,973	49,551,181	55.7
Palau	31-May-21	14-Feb-23	5,988	1	9	-	33,252	20,750	18,497		85.9
Papua New Guinea	21-Mar-20	01-Feb-23	46,750	-	670	-	533	369,998	310,717	32,384	3.1
Samoa	18-Nov-20	06-Feb-23	16,109	-	29	-	8,173	191,171	177,741	79,360	79.9
Solomon Islands	03-Oct-20	24-Nov-22	24,575	-	153	-	3,669	343,821	254,352	27,783	35.1
Republic of Korea**	20-Jan-20	14-Feb-23	30,369,744	14,371	33,766	19	58,732	44,867,046	44,448,105	41,325,954	85.8
Sri Lanka	27-Jan-20	14-Feb-23	672,015	3	16,829	-	3,082	17,143,761	14,752,827	8,220,002	67.6
Timor Leste	21-Mar-20	14-Feb-23	23,417	1	138	-	1,811	878,845	790,466	315,249	58.9
Tonga	05-Nov-21	10-Feb-23	16,795	-	13	-	16,073	91,949	77,464	38,331	72.5
Türkiye	10-Mar-20	12-Dec-22	17,041,315	-	101,487	-	20,426	57,941,051	53,176,961	41,425,329	62.3
Vanuatu	11-Nov-20	06-Jan-23	12,014	-	14	-	4,006	144,824	131,697	16,996	40.3
Wallis et Futuna	17-Oct-20	31-Dec-22	3,427	-	7	-	21,385	7,150	6,803	3,766	58.7
ASIA PACIFIC			147,954,020	35,196	873,473	19	684,487	2,969,529,983	2,801,441,170	849,172,870	

*Includes cases from Hong Kong (SAR), Macau (SAR), and Taiwan (Province of China)

**Republic of Korea – South Korea

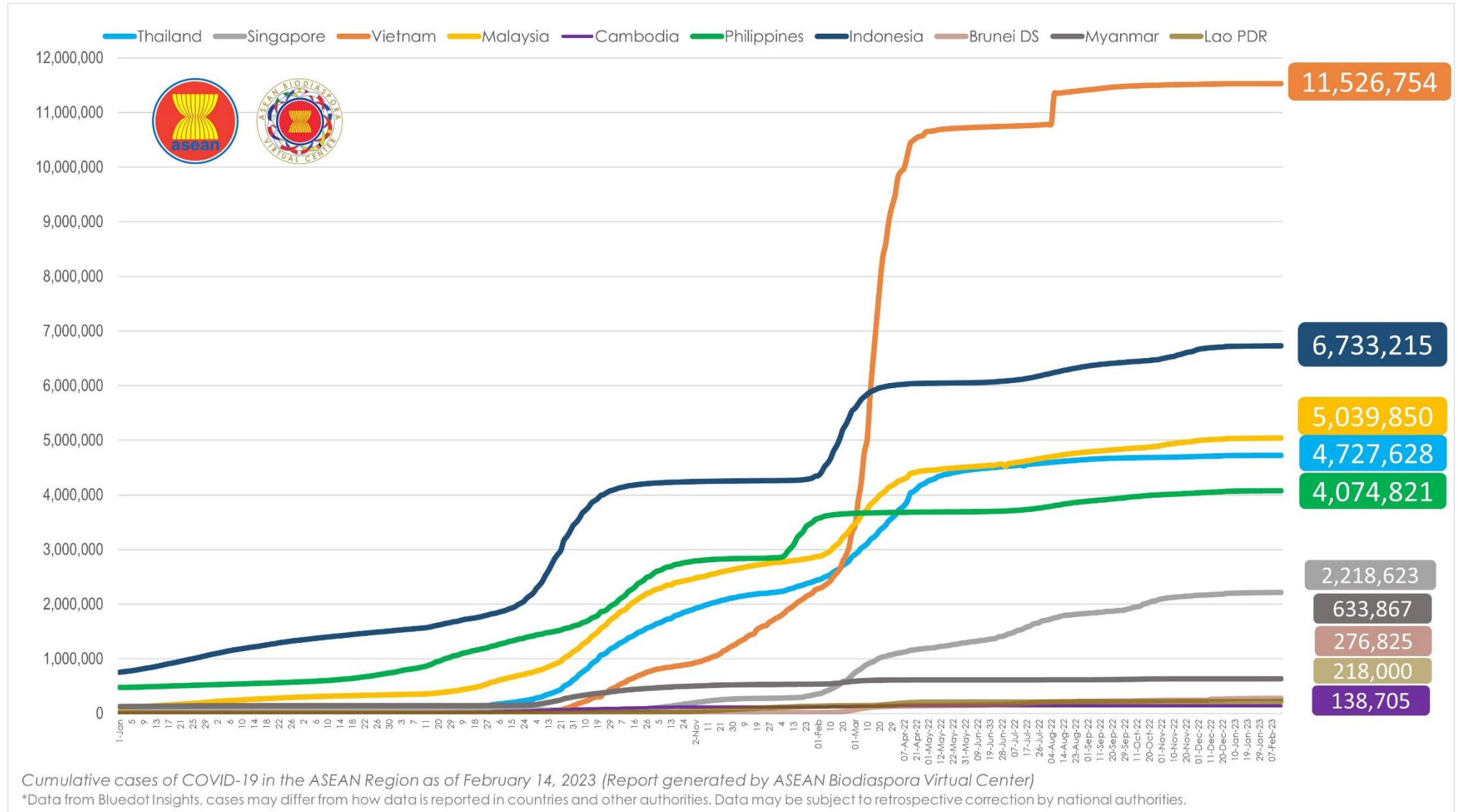
- **485,502,004 confirmed cases** of COVID-19 have been reported in other **4 regions** (other than ASEAN and Asia-Pacific countries):

REGION	TOTAL CONFIRMED CASES	NEW CASES	TOTAL DEATHS	NEW DEATHS	CUMULATIVE CASES/ 100,000	CUMULATIVE VACCINATED	CUMULATIVE FULLY VACCINATED	CUMULATIVE BOOSTERED
AFRICA	13,047,283	2,368	259,501	3	248,919	484,058,451	398,811,838	66,003,692
AMERICAS	192,964,229	3,155	2,959,233	27	1,241,289	835,447,892	731,893,384	495,237,137
EUROPE	256,781,940	17,363	2,067,109	121	2,088,500	584,961,730	555,873,346	396,785,225
MIDDLE EAST	22,708,552	759	239,734	10	216,016	144,725,560	130,012,483	60,203,464
TOTAL	485,502,004	23,645	5,525,577	161	3,794,724	2,049,193,633	1,816,591,051	1,018,229,518



COVID-19 Epi curve among ASEAN Countries:

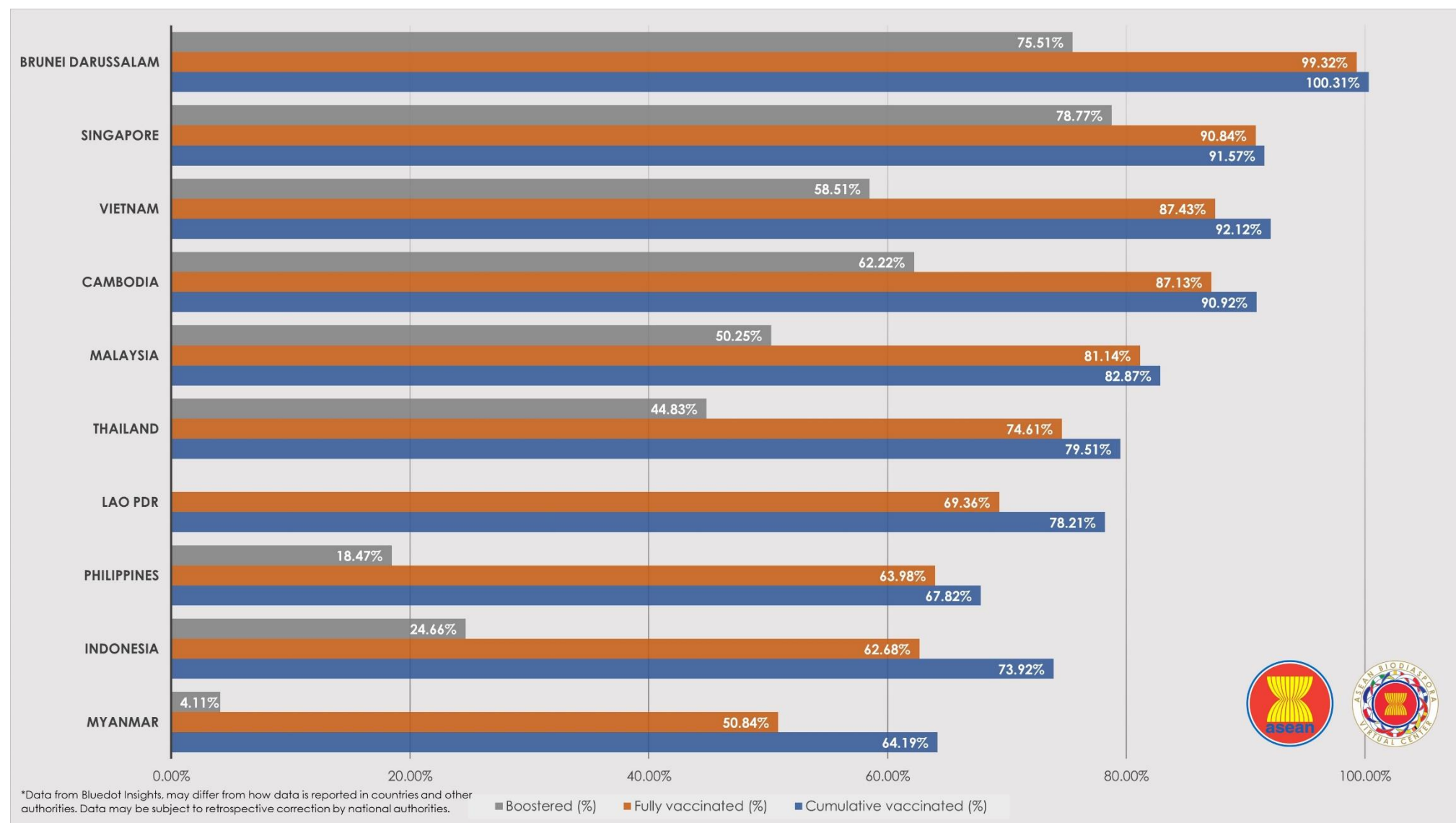
From January 1, 2021 to February 14, 2023





ASEAN COVID-19 Vaccination Status


as of 14 February 2023





ASEAN COVID-19 Outlook Assessment

as of 12 February 2023

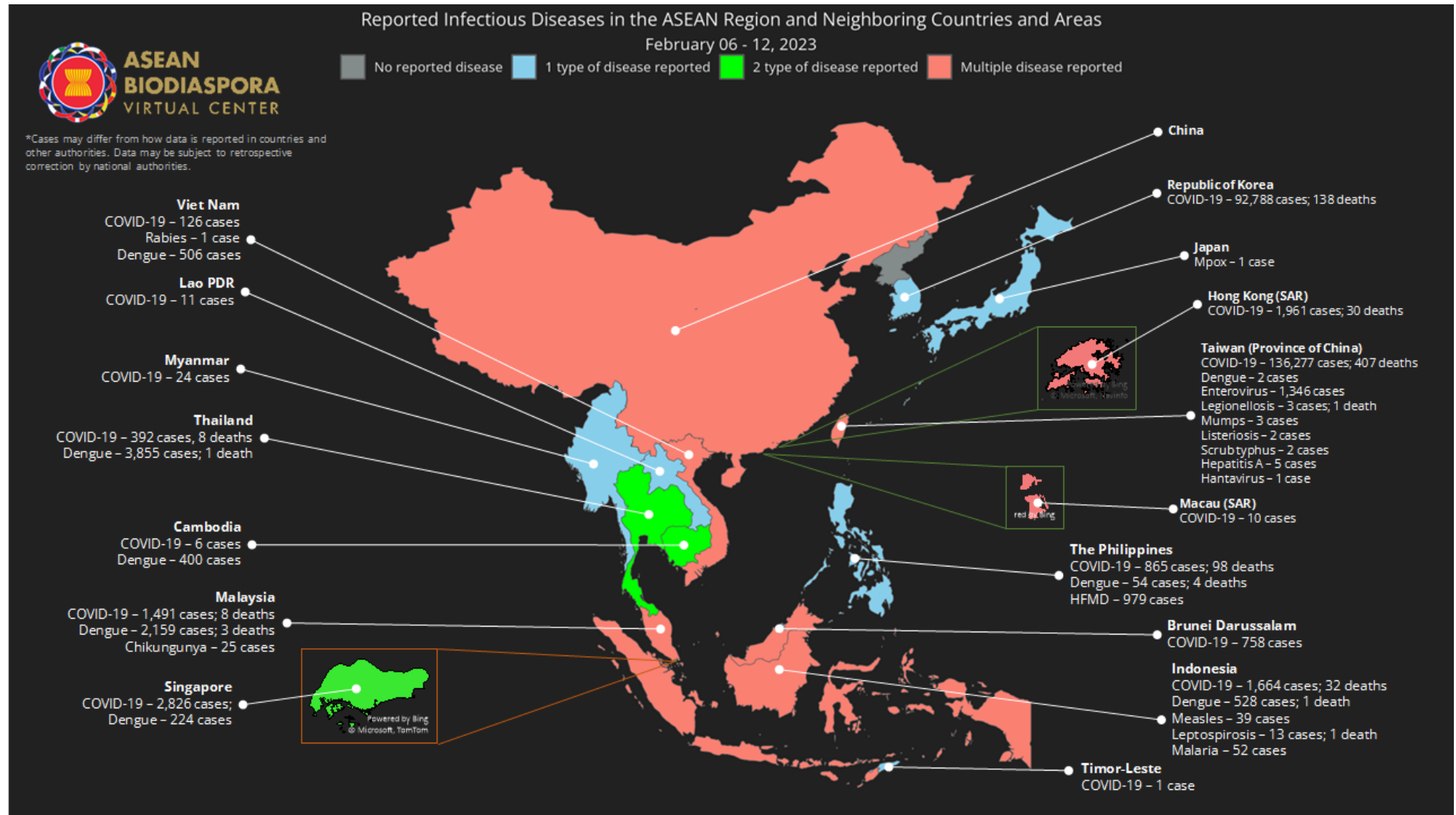
 ASEAN MEMBER STATE	<p>At least 65% of the total population has a level of immunity to COVID-19; either recovered from COVID-19 or have been vaccinated with at least one dose of a COVID-19 vaccine.</p> <p>Case levels are generally low (a 7-day rolling average number of daily new cases that is <10 cases per 100,000, with each day's past-14-day test positivity is consistently <5%).</p> <p>Government Policy on containment and health (strictness and comprehensiveness in COVID-19 related government policies)</p>			
	% of Total population fully vaccinated / boosted	Population vaccinated/ day (7-day average)	Daily cases/ 100,000	Containment and health index score - Oxford COVID-19 Government Response Tracker (OxCGRT)
Brunei Darussalam	≥90.0/75.5	Unknown	24.99	31.0/100
Cambodia	≥90.0/62.2	Unknown	0.01	31.5/100
Indonesia	66.1/24.7	Unknown	0.08	54.2/100
Lao PDR	77.3/ND	Unknown	0.05	61.6/100
Malaysia	84.5/50.3	0%/day	0.85	51.8/100
Myanmar	52.1/4.1	Unknown	0.006	69.1/100
Philippines	71.6/18.5	Unknown	0.12	55.4/100
Singapore	≥90.0/78.8	Unknown	7.47	58.9/100
Thailand	77.7/44.8	Unknown	0.10	31.5/100
Vietnam	≥90.0/58.5	Unknown	0.01	43.5/100

All of the countries have achieved the Population vaccinated/ day (7-day average) except Vietnam



Infectious Diseases in ASEAN Region and Neighboring Countries

From February 6-12, 2023





Infectious Diseases Other than COVID-19, Mpox, and Dengue

February 6-12, 2023

Infectious Disease Global Updates

Marburg Virus Disease (MVD)

- **Equatorial Guinea:** Following up on the unknown deaths reported in Equatorial Guinea, the Ministry of Health now confirms its first-ever outbreak of Marburg virus disease (MVD). Equatorial Guinean health authorities sent samples to the Institut Pasteur reference laboratory in Senegal with support from the World Health Organization (WHO) to determine the cause of the disease after an alert by a district health official on February 7. Out of the eight samples tested at Institut Pasteur, one turned out positive for MVD. Currently, there were nine deaths and 16 suspected cases with symptoms including fever, fatigue, and blood-stained vomit and diarrhea. According to authorities, further investigations are ongoing and teams have been deployed in the affected districts for contact tracing and provision of medical care to symptomatic individuals. Efforts are also underway to rapidly mount an emergency response, with WHO deploying health emergency experts in epidemiology, case management, infection prevention, laboratory, and risk communication to support the national response efforts and secure community collaboration in outbreak control.

Pediatric Influenza

- **USA:** Hawaii's Department of Health (DOH) announced on February 10 (Friday) its first pediatric flu death of the season. Hawaii's last pediatric death from influenza occurred in January 2020. In the past week, the Centers for Disease Control and Prevention (CDC) reported the number of flu deaths in children has topped 100 (106 pediatric deaths as of February 10), the highest number of flu deaths in children since the start of the COVID-19 pandemic. Among the 106 reported pediatric flu deaths this season, 41 occurred in children younger than 5 years old and the remaining 65 deaths occurred in children 5 years to 17 years old.
- The US Centers for Disease Control and Prevention (CDC) reported in its weekly flu update that the percentage of outpatient visits for flu-like illness remained at 2.6%, just above the national baseline. Only three jurisdictions including New Mexico, New York City, and Puerto Rico reported high flu activity. Other markers have also declined, including percent of respiratory symptoms testing positive, hospitalizations, deaths, and nursing home outbreaks. Of viruses tested at public health labs, 94.8% were influenza A. And, of subtyped influenza A viruses, 54.2% were the H3N2 strain and 45.8% were 2009 H1N1. The CDC, however, reported 9 more pediatric flu deaths, putting the current season's total at 106. Eight involved influenza A, and one was due to influenza B. Of five subtyped influenza A viruses, all were H3N2. In total deaths reported influenza A was responsible for 103 of the deaths, and, of 59 subtyped viruses, 83% were H3N2. The CDC also added that other indicators show that the current season has been moderately severe for kids compared with past seasons. [\[Full article\]](#)

Measles

- **Pakistan:** The Sindh Health Department has provided an update on a measles outbreak under investigation (initially reported as unknown illness) in the Keamari district, in Karachi, Pakistan. Health officials report that of 13 patient samples sent for testing, four have tested positive for measles and one tested positive for dengue. No further information has been provided for the other eight cases. The district health office reports that cases of an unknown illness began presenting in late December 2022; however, it wasn't until late January 2023 that samples were collected and sent for testing. During



this time, a combined measles and polio vaccination campaign was carried out due to the large number of individuals who had not received routine vaccinations such as the measles vaccine. Given the patient sample results, and the large under-vaccinated population in this area, it is possible that similar symptoms currently reported by many other individuals may be due to measles; furthermore, it is likely that this suspected measles outbreak has carried over from 2022. Earlier reports state that toxic fumes and foul smells emitted from nearby factories may have caused illness in some of the affected individuals; however, the Sindh Environmental Protection Agency reports that laboratory tests showed no air quality results exceeded maximum limits. It is unclear if there is any connection between the reported fumes and deaths for which patient samples have not been collected or reported. BlueDot will continue to update this situation under the event for measles in Pakistan.

Anthrax

- Bulgaria:** A case of cutaneous anthrax has been reported in the Bulgarian province of Dobrich in 2023. Dobrich, located in the northeastern corner of the country bordering the Black Sea and Romania, is known for its strong agricultural industry. Due to historical cases, it is suspected that the current case was contracted from an infected animal. This represents the first case of cutaneous anthrax in Dobrich since 2015, when a woman died after coming into contact with contaminated meat. Once the source was identified a vaccination campaign for animals in the village was rolled out and prophylactic treatment was given to contacts of the deceased. For the currently affected individual, epidemiological investigations are ongoing in order to identify a source of infection.

Wild Poliovirus Type 3 (WPV3)

- Netherlands:** This is a follow-up to the poliovirus event involving the positive environmental samples and the asymptomatic case detected at the poliovirus essential facility (responsible for diagnostic, vaccine, and research) via routine surveillance in 2022. Testing indicated the presence of wild poliovirus type-3 Saukett G strain (a component of the inactivated polio vaccine) in facility sewage samples on November 15, 2022. Subsequent follow-up samples from the affected site have tested negative as of January 10, 2023. Furthermore, the affected employee has since completed isolation on January 11, 2023 after testing negative in three consecutive stool tests. Stringent containment protocols according to national guidelines were implemented to reduce the risk of possible transmission.

Infectious Disease in ASEAN region and Neighboring Countries Updates

Measles

- Indonesia:** As many as 39 toddlers in Bangkalan Regency are suspected of being exposed to measles.⁸ This prompted the Health Service to immediately send samples of a number of toddlers to the Center for Health Laboratory (BBLK) of East Java Province.⁸ Head of the Bangkalan Health Service, Sudiyo said, of the 39 toddlers with suspected measles, only 13 who were willing sent samples.⁸ He said the detection of the disease was done through tracing or tracking at a number of puskesmas in Bangkalan.⁸ From that tracking, results were obtained from five sub-districts namely Ten District, Tanjung Bumi, Tanah Merah, Arosbaya and Galis District.⁸ "Because of these results, we also continue to actively track the homes of residents who have toddlers," he added.⁸ Allegedly, exposure to the measles virus was caused by incomplete immunizations during the COVID-19 Pandemic two years ago.⁸ He appealed to the public to actively check their children if they have a fever or are sick. In addition to preventing exposure to measles, prompt treatment can help children recover quickly.⁸ [\[Full article\]](#)



Malaria

- Indonesia:** As many as 52 residents of Sungai Tebal Hamlet, Dusun Tuo Village, Lembah Masurai District, Merangin Regency, Jambi Province, who live in a plantation area, have been diagnosed with malaria.⁷ Deputy Regent of Merangin Regency Nilwan Yahya said Friday that this condition had prompted the Ministry of Health to send a letter to the local Health Service declaring that Sungai Tebal Hamlet, Dusun Tuo Village, has an Extraordinary Malaria Case (KLB).⁷ A total of 52 cases of malaria have been treated by village midwives and medical staff at the Pasar Masurai Health Center.⁷ The Vice Regent asked the midwives in the hamlet to continue combing the inland area of the Sungai Tebal plantation, where there is a possibility that some residents may still be sick with malaria.⁷ The head of the Pasar Masurai Community Health Center Midwife Neti Puspitasari said that dozens of residents who were infected with malaria were located in plantations that were relatively far from the puskesmas. It takes at least three to four hours by motorbike to reach it.⁷ His party has also distributed mosquito nets and medicines free of charge from the Health Service.⁷ [\[Full article\]](#)

Hand, Foot, and Mouth Disease

- Philippines:** Hand, Foot and Mouth Diseases (HFMD) cases in Negros Occidental have increased by 6,300%, from January to February 4 this year, compared to the same period in 2022.⁹ It soared from five cases last year, to 315 cases this year, according to a report of the Provincial Health Office.⁹ HFMD is a highly contagious viral disease affecting various life stages, but occurs most often in children.⁹ Infection can be transmitted by person to person contact through nose and throat secretions, saliva nasal mucus, fluid from blisters, or the stool of infected persons.⁹ In his report submitted to Gov. Eugenio Jose Lacson, Provincial Health Officer Dr. Ernell Tumimbang disclosed that Kabankalan City has the highest number of HFMD cases with 73.⁹ HFMD is common among young children under five years old, although anyone could still get infected.⁹ Although HFMD is very contagious, the illness is however, not serious.⁹ Symptoms include fever, painful sores in the mouth and a rash with blisters on hands, feet and buttocks.⁹ However, severe symptoms such as meningitis, encephalitis and polio may occur, PHO said.⁹ It added that it has become an important public health disease due to its tendency to cause large outbreaks and deaths, among infants and children.⁹ The PHO sounded the alarm bells for local government units, especially their respective municipal and health offices, to intensify information drives on how to avoid HFMD, such as observing minimum public health standards.⁹ [\[Full article\]](#)

Enterovirus

- Taiwan:** Taiwan's Centers for Disease Control and Prevention (Taiwan CDC) reported today the first severe enterovirus D68 case of the year.¹⁰ The patient, a 4-year-old girl in southern Taiwan, developed a mild cough and runny nose symptoms on January 5 and did not seek medical attention.¹⁰ On the 7th, she developed symptoms such as fever, shortness of breath, and abdominal pain and went to the doctor.¹⁰ She went to the doctor again the next day because the symptoms were not relieved.¹⁰ After examination, exacerbation of asthma and myocarditis was reported and she was transferred to the intensive care unit for continuous treatment.¹⁰ Testing confirmed she was infected with enterovirus D68.¹⁰ The hospital reported that enterovirus infection was complicated by severe illness.¹⁰ After treatment, the patient was in stable condition and was discharged from the hospital. She has now returned to normal life.¹⁰ According to the monitoring data of the CDC, as of February 6, 2023, last week (January 29, 2023 to February 4, 2023), there were a total of 1,330 outpatient and emergency visits to enterovirus in Taiwan, compared with the previous week (933) The increase was 42.6%, mainly due to the resumption of outpatient visits after the Spring Festival holiday, but it



was still lower than the second to third weeks before the Spring Festival (1824 and 2032 visits), and the recent contract laboratory monitoring still detected enteroviruses, showing that the community Enterovirus activity continues in Taiwan.¹⁰ Schools at all levels will reopen next week.¹⁰ The resumption of active student activities may increase the risk of epidemic transmission.¹⁰ The CDC reminds the public that enterovirus D68 is transmitted through fecal-oral, droplet, or contact.¹⁰ The symptoms are mainly fever, runny nose, and cough, which are not as common as herpetic angina or hand-foot-mouth disease, which are common with typical enteroviruses.¹⁰ Similarly, a small number of patients may develop complications such as pneumonia, encephalitis, and limb paralysis.¹⁰ [\[Full article\]](#)

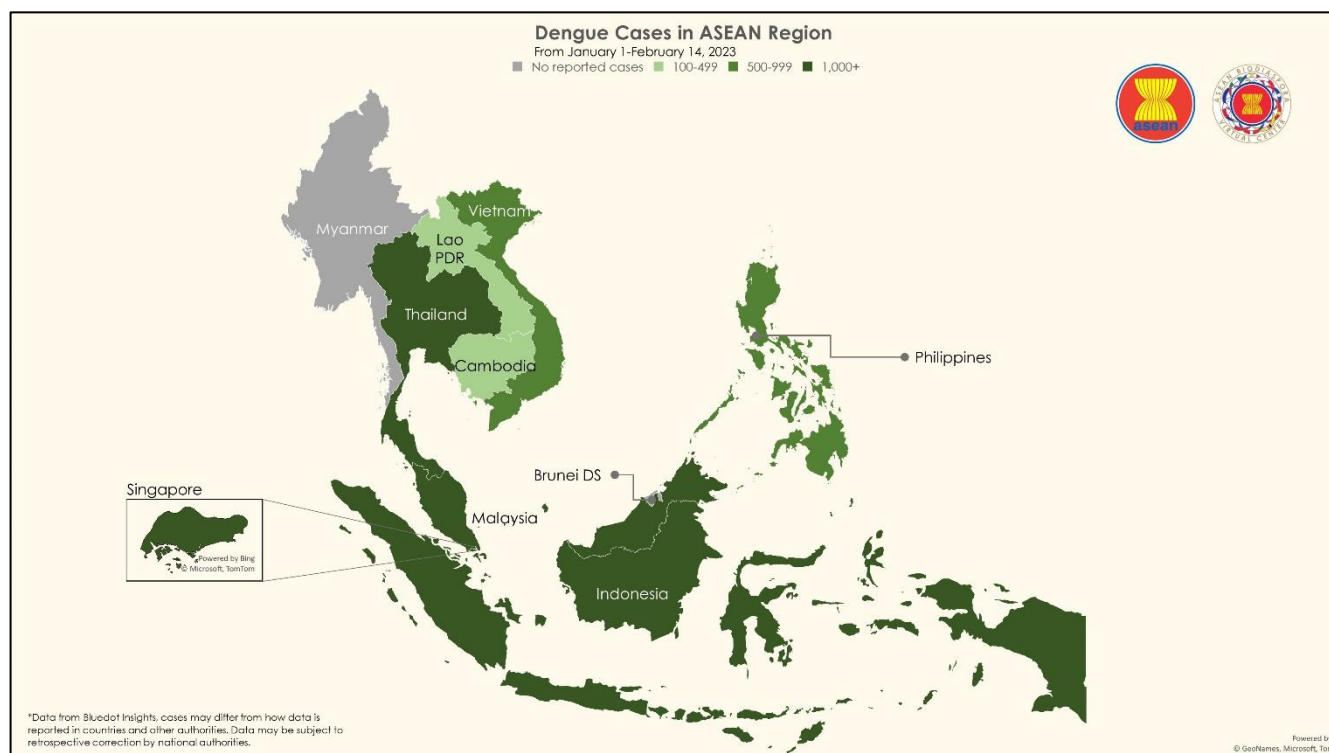
Hantavirus

- Taiwan:** The CDC announced today the first case of hantavirus in China this year.¹¹ A woman in her 30s developed symptoms such as eye socket pain, fever, and abdominal pain successively in mid-January. She sought medical treatment and took antipyretic drugs, but the symptoms did not improve.¹¹ After being hospitalized, she was diagnosed with Hantavirus infection and was discharged from the hospital in a stable condition.¹¹ It is understood that although the patient's home is engaged in the work of raising white rats, all the white rats in the house were tested negative recently.¹¹ It is suspected that there is a common source of infection in the environment and suspected contact with wild rat excrement.¹¹ There are currently 9 related contacts, 2 of whom have a fever, 7 people have no suspected symptoms, the health unit has arranged for the contacts to be tested and sent for testing, and the possible source of infection has been clarified.¹¹ The source of exposure to infection is more likely to come from wild rodents.¹¹ Luo Yijun said that woman in her 30s was diagnosed this time through a positive serum 2 test, while another family member living with her was negative and asymptomatic.¹¹ The health unit has launched various epidemic investigations, arranged for contacts to be tested and sent for testing, went to the surrounding area of the case's house to conduct rat hunting operations to clarify the possible source of infection, and carried out prevention and control work such as public hygiene and education.¹¹ According to statistics from the CDC, there were 5 confirmed cases of hantavirus syndrome in China last year, and the places of residence of the cases were Taipei City (2 cases), New Taipei City, Kaohsiung City, and Changhua City (1 case each), and a total of 41 cases since 2011.¹¹ 30 cases (73%) were male by gender, and 29 cases (71%) were over 40 years old, and 1 case was overseas (infected country was Indonesia).¹¹ [\[Full article\]](#)



Dengue Cases in ASEAN Region

From January 1 to February 14, 2023



Dengue cases in ASEAN region

Country	Dengue Cases	New Cases in the Past Week	Deaths	Case Fatality Rate (CFR)
Brunei Darussalam	-	-	-	-
Cambodia	400	400	-	-
Indonesia	2,930	1,993	24	0.82%
Lao PDR	238	0	-	0.00%
Malaysia	11,127	2,159	6	0.05%
Myanmar	-	-	-	-
Philippines	841	54	9	1.07%
Singapore	1,242	224	0	0.00%
Thailand	3,855	3,855	1	0.03%
Vietnam	506	506	-	0.00%
Total	21,139	9,191	40	0.19%

*Data from Bluedot Insights, cases may differ from how data is reported in countries and other authorities. Data may be subject to retrospective correction by national authorities.

- ASEAN region reported **9,191** new dengue cases from February 8 to 14, 2023 in Cambodia, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. The region reported **21,139** total cases and **40** total deaths in 2023 with **0.19%** CFR.



Dengue

- **Indonesia:** The Health Office (Dinkes) of Sukabumi City, West Java, reminded the public to remain vigilant about the potential for the spread of dengue hemorrhagic fever (DHF).⁴ Moreover, at the beginning of 2023, a DHF patient was reported to have died.⁴ "From the available data, from January to early February 2023, there were 43 cases of dengue fever and one of them died," said the Head of the Disease Prevention and Control (P2P) Division of the Sukabumi City Health Office, Wita Darmawanti.⁴ [\[Full article\]](#)
- **Malaysia:** The Ministry of Health of Malaysia reported that as of February 8, 11,127 dengue fever cases have been recorded in the country.⁵ This is a 211.4 percent increase compared to the same period in 2022 (3,573).⁵ Six dengue related fatalities have been reported in Malaysia to date, compared to zero last year at this time.⁵ [\[Full article\]](#)
- **Philippines:** Dengue cases in Negros Occidental have continued to increase.⁶ The provincial health office (PHO) said 148 cases were recorded from January to Feb. 4, an increase of 142.62%, compared to the 61 during the same period last year.⁶ Bacolod logged 50 cases, an increase of 72.4 percent compared to last year.⁶ The cities of Himamaylan, Silay and Bacolod each recorded one dengue-related death.⁶ Clustering of cases was reported in six barangays in Bacolod, Bago, Cadiz, Silay and Pulupandan.⁶ [\[Full article\]](#)



Special Report on Notable Diseases

Unknown Hemorrhagic Fever

- **Cameroon:** Cameroonian health authorities have reported two cases of undiagnosed hemorrhagic fever in Olamze, a district which is approximately 100km or a 2-hour drive across the border to Nsok-Nsomo in Kie-Ntem Province, Equatorial Guinea. The cases are suspected to be Marburg disease given the proximity to Kie-Ntem Province, which has been the focal region of the Marburg virus outbreak declared on Monday 13-Feb-2023.

On 10-Feb-2023, Cameroon restricted movement along its border with Equatorial Guinea following reports of undiagnosed hemorrhagic fever in Equatorial Guinea. Additionally, on the same day Gabon implemented systematic testing of a sample of travellers crossing the border from both Equatorial Guinea and Cameroon, and increased public education on hemorrhagic fevers for the village populations along the borders.

On 13-Feb-2023, Equatorial Guinea declared its first Marburg virus outbreak, following laboratory confirmation of the virus in Kie-Ntem Province, Equatorial Guinea.

On 13-Feb-2023, Cameroonian health authorities have reported two suspected Marburg cases in Olamze. Olamze is in close proximity to the border of Kie-Ntem Province, Equatorial Guinea. However, neither of the individuals are reported to have previous travel history to Equatorial Guinea. Health authorities state that 42 contacts of the affected individuals have been identified and contact tracing is ongoing while test results are pending.

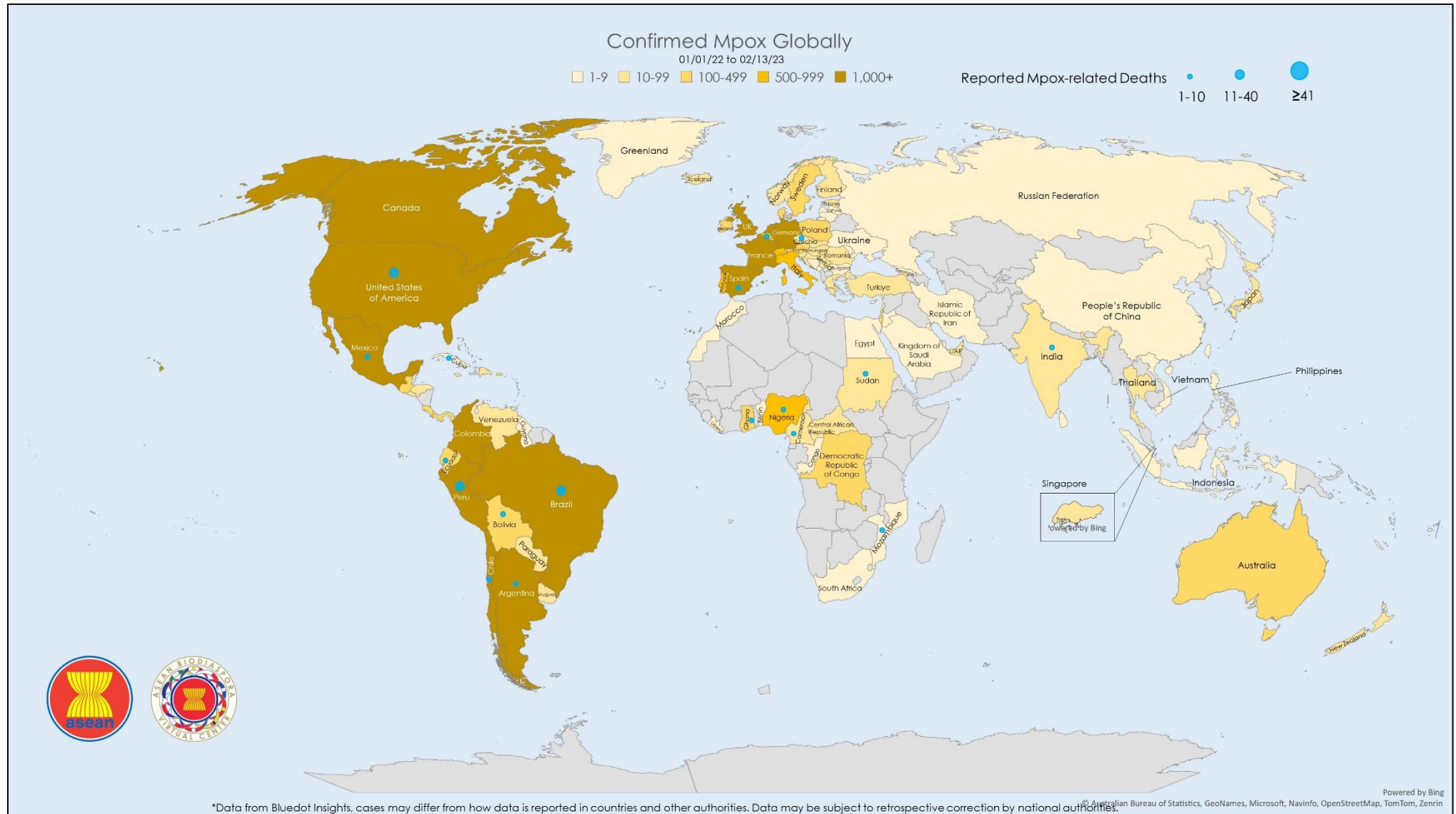
Nipah Virus Outbreak

- **Bangladesh:** A 22-year-old youth from Narsingdi, who was infected with Nipah virus, died at Dhaka Medical College Hospital this evening while undergoing treatment. Shah Alam breathed his last at the hospital's emergency department around 8:00pm, DMCH Director Brigadier General Nazmul Haque told The Daily Star. The patient was admitted to the hospital on Friday with fever. As his condition deteriorated, doctors suggested Nipah virus test and it came out positive in the evening. He died shortly afterwards. Hailing from of Narsigdi's Raipura, Shah Alam was the youngest among three siblings. He used to live in Shibpur area with his family. Rasel Mia, brother-in-law of the deceased, said Shah Alam used to work in a Chinese company in the area. A few days back, five to six of friends had consumed raw date juice. The relative said Shah Alam suddenly caught a fever last Thursday. He was given paracetamol tablets from the local pharmacy. The next day, the fever worsened and he became dizzy and started vomiting. Seeing this condition, he was taken to Narsingdi Sadar Hospital from where he was sent to DMCH on Friday night. With him, at least 11 people were infected with Nipah virus and of them eight people died, according to Institute of Epidemiology, Disease Control and Research (IEDCR). [\[Full article\]](#)



Mpox (Monkeypox) Cases Reported Globally

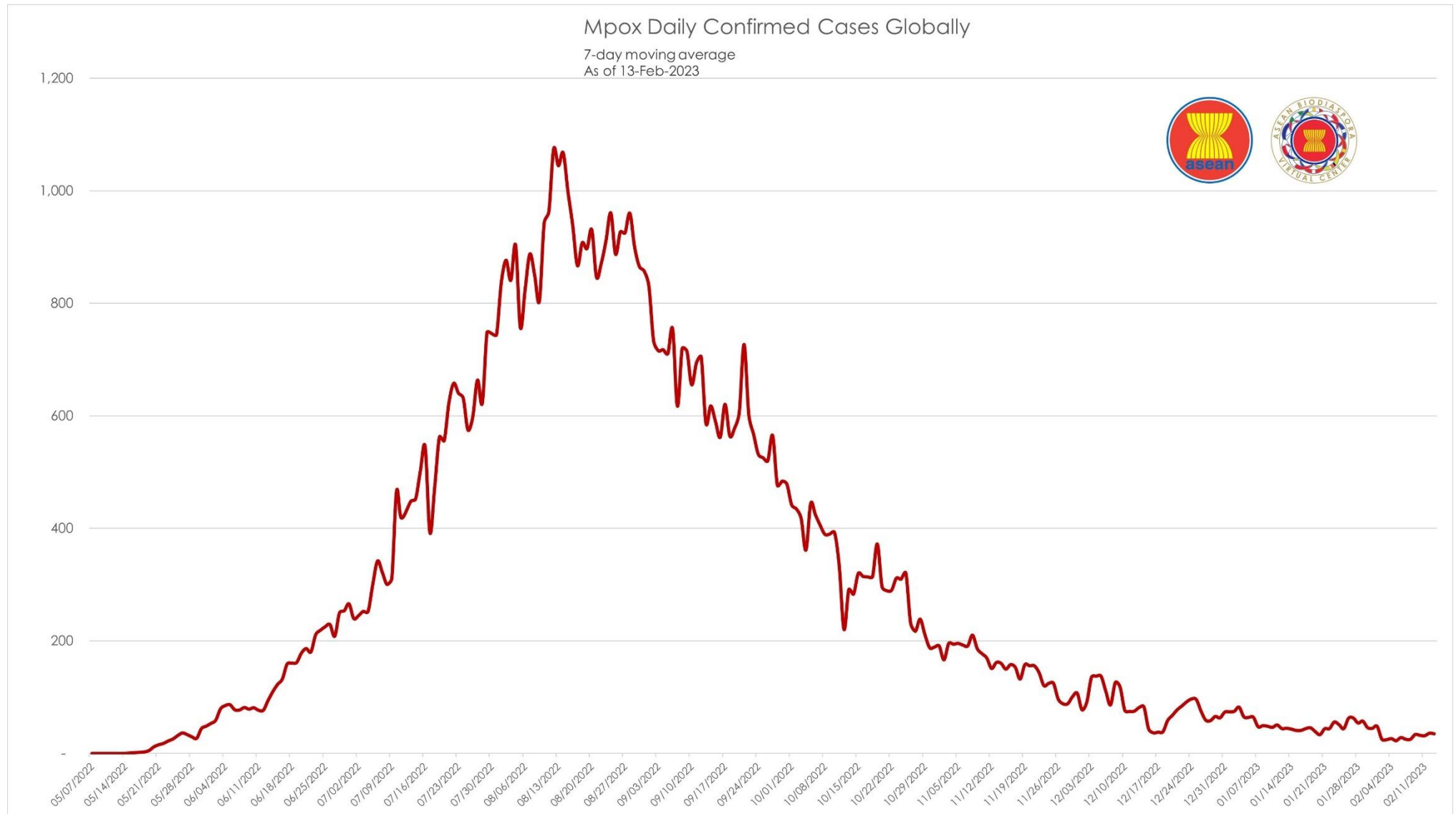
as of February 13, 2023





Mpox Daily Trend Globally

as of February 13, 2023





Mpox: Highlights and Situation Overview

- As of 15 February 2023 (1PM, GMT+7), worldwide, there were **85,861** confirmed cases, including **93** deaths. Globally, Case Fatality Rate (CFR) was **0.11%**.
- 43 confirmed cases** in the ASEAN region, with CFR of **0%**.
- 85,818 confirmed cases** of Mpox have been reported in other **5 regions** (other than ASEAN region):

Mpox cases in ASEAN region

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Indonesia	1	-	-	0.00%
Philippines	4	-	-	0.00%
Singapore	21	-	-	0.00%
Thailand	15	-	-	0.00%
Vietnam	2	-	-	0.00%
ASEAN Total	43	-	-	0.00%

Mpox cases in Asia-Pacific region

Country/Territory	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
Australia	144	-	-	0.00%
India	22	-	1	5.00%
Japan	19	-	-	0.00%
New Caledonia	1	-	-	0.00%
New Zealand	41	-	-	0.00%
People's Republic of China*	7	-	-	0.00%
Republic of Korea	4	-	-	0.00%
Sri Lanka	2	-	-	0.00%
Asia-Pacific Total	240	-	1	0.42%

*People's Republic of China – including Hongkong (SAR), Macao (SAR), and Taiwan (Province of China)

Top 5 countries with most mpox cases globally

Country	Total Cases	New Cases	Deaths	Case Fatality Rate (CFR)
United States of America	29,974	26	28	0.09%
Brazil	10,808	50	15	0.14%
Spain	7,533	-	3	0.04%
France	4,128	-	-	0.00%
Colombia	4,074	-	-	0.00%



Mpox cases per region

REGION	TOTAL CONFIRMED CASES SINCE JANUARY 1, 2022	NEW CASES SINCE THE PREVIOUS REPORT	TOTAL DEATHS	CASE FATALITY RATE
AFRICA	1,374	-	17	1.24%
AMERICAS	58,322	93	70	0.12%
ASEAN	43	-	-	0.00%
ASIA PACIFIC	240	-	1	0.42%
EUROPE	25,559	2	5	0.02%
MIDDLE EAST	321	-	-	0.00%
TOTAL	85,861	95	93	0.11%



References

1. Yechezkel, Matan, et al. "Safety of the Fourth COVID-19 bnt162b2 Mrna (Second Booster) Vaccine: A Prospective and Retrospective Cohort Study." *The Lancet Respiratory Medicine*, vol. 11, no. 2, Feb. 2023, pp. 139–150., [https://doi.org/10.1016/s2213-2600\(22\)00407-6](https://doi.org/10.1016/s2213-2600(22)00407-6).
2. Schmidt, Matthieu, et al. "Comparative Outcomes of Extracorporeal Membrane Oxygenation for COVID-19 Delivered in Experienced European Centres during Successive SARS-COV-2 Variant Outbreaks (ECMO-Surges): An International, Multicentre, Retrospective Cohort Study." *The Lancet Respiratory Medicine*, vol. 11, no. 2, Feb. 2023, pp. 163–175., [https://doi.org/10.1016/s2213-2600\(22\)00438-6](https://doi.org/10.1016/s2213-2600(22)00438-6).
3. Kwan, Alan C., et al. "Association of Covid-19 Vaccination with Risk for Incident Diabetes after COVID-19 Infection." *JAMA Network Open*, vol. 6, no. 2, 14 Feb. 2023, <https://doi.org/10.1001/jamanetworkopen.2022.55965>.
4. Iman, Riga Nurul. "43 Kasus Dbd Di Kota Sukabumi, Satu Orang Meninggal." *Republika Online*, *Republika Online*, 8 Feb. 2023, <https://repjabar.republika.co.id/berita/rpqr9h432/43-kasus-dbd-di-kota-sukabumi-satu-orang-meninggal>.
5. "Malaysia Dengue Cases up 211% in 2023 to Date." *Outbreak News Today*, 12 Feb. 2023, <http://outbreaknewstoday.com/malaysia-dengue-cases-up-211-in-2023-to-date-79998/>.
6. Bayoran, Gilbert. "Negros Occidental Dengue Cases Increasing." *Philstar.com*, *Philstar.com*, 11 Feb. 2023, <https://www.philstar.com/nation/2023/02/12/2244280/negros-occidental-dengue-cases-increasing>.
7. Tuyani. "Puluhan Warga Kecamatan Masurai Merangin Jambi Terserang Malaria." *Antara News*, *ANTARA*, 10 Feb. 2023, <https://www.antaranews.com/berita/3389331/puluhan-warga-kecamatan-masurai-merangin-jambi-terserang-malaria>.
8. Zamachsari. "Diduga Terpapar Campak, Dinkes Bangkalan Kirim 13 Spesimen Balita Ke BBLK Jatim." *Beritajatim.com | Portal Berita Jawa Timur Hari Ini*, 8 Feb. 2023, <https://beritajatim.com/pendidikan-kesehatan/diduga-terpapar-campak-dinkes-bangkalan-kirim-13-spesimen-balita-ke-bblk-jatim/>.
9. Beltran, Roger. "NEGOCC HFMD Cases Soar 6,300%." *Visayan Daily Star*, 9 Feb. 2023, <https://visayandailystar.com/negocc-hfmd-cases-soar-6300/>.
10. "Taiwan Reports 1st Severe Enterovirus D68 Case of the Year." *Outbreak News Today*, 6 Feb. 2023, <http://outbreaknewstoday.com/taiwan-reports-1st-severe-enterovirus-d68-case-of-the-year-91201/>.
11. Xu, Zhengyu. "First Case of Hantavirus This Year! Female in Her 30s 'Suspected of Family Gathering' but All Rats at Home Were Negative." *聯合新聞網*, *聯合新聞網*, 10 Feb. 2023, <https://udn.com/news/story/7266/6963483>.
12. Kwan, Alan C., et al. "Association of Covid-19 Vaccination with Risk for Incident Diabetes after COVID-19 Infection." *JAMA Network Open*, vol. 6, no. 2, 14 Feb. 2023, <https://doi.org/10.1001/jamanetworkopen.2022.55965>.
13. Han, Xiaoyu, et al. "Longitudinal Assessment of Chest CT Findings and Pulmonary Function in Patients after COVID-19." *Radiology*, 14 Feb. 2023, <https://doi.org/10.1148/radiol.222888>.



Report generated by
ASEAN Biodiaspora Virtual Center (ABVC)
in collaboration with Bluedot Inc.
Email: support@biodiaspora.org
Facebook: <https://facebook.com/ASEANBiodiaspora>
Instagram: <https://instagram.com/ASEANBiodiaspora>



In partnership with
Canada